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14 CFR Part 137 Oversight Model

August 2007

Final Report

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TABLE OF CONTENTS

			Page
EXE	CUTIV	E SUMMARY	xi
1.	INTF	RODUCTION	1
	1.1 1.2	14 CFR Part 137 Oversight Model Objectives	1 2
2.	IDEF	FO NOTATION	2
3.	14 C	FR PART 137 OVERSIGHT MODEL DESCRIPTION	4
	3.1	Model Definition	4
		3.1.1 Purpose3.1.2 Scope3.1.3 Viewpoint3.1.4 Audience	4 5 5 5
	3.2	14 CFR Part 137 Oversight Model Development Philosophy	5
		3.2.1 Activity (function) Decomposition3.2.2 Directives Arrows3.2.3 Control Patterns	5 7 7
4.	14 C	FR PART 137 OVERSIGHT MODEL ACTIVITY HIERARCHY	8
5.	MOL	DEL DIAGRAMS	9
	5.1 5.2	A-0—Perform 14 CFR Part 137 Oversight A0—Perform 14 CFR Part 137 Oversight	11 14
		5.2.1 A1—Manage Oversight Operations	17
	5.3	A2—Perform Operations Inspections	21
		 5.3.1 A2.1—Manage Operations Inspections 5.3.2 A2.2—Review FAA Order 8700.1 5.3.3 A2.3—Review Operator Information 5.3.4 A2.4—Perform Operation Inspection 5.3.5 A2.5—Perform Investigation 5.3.6 A2.6—Provide Operation Inspection Resource 	23 24 25 26 28 30

5.4	A3—Perform Airworthiness Inspections	33
	5.4.1 A3.1—Manage Airworthiness Inspections	35
	5.4.2 A3.2—Review FAA Order 8300	36
	5.4.3 A3.3—Review FAA Operator Information	37
	5.4.4 A3.4—Perform Airworthiness Inspection	38
	5.4.5 A3.5—Perform Airworthiness Investigation	40
	5.4.6 A3.6—Provide Airworthiness Inspection Resource	41
5.5	A4—Provide Resources	44
	5.5.1 A4.1—Maintain Inspection Resources	45
	5.5.2 A4.2—Maintain and Provide Automation Needs	45
	5.5.3 A4.3—Provide Training	46
	5.5.4 A4.4—Provide Staffing for Inspection Resources	47
14 C	FR PART 137 RELATED INFORMATION	48
6.1	Systems and Databases	48
6.2	Regulations, Orders, Bulletins, and Advisory Circulars	49
	5.5 14 C 6.1	 5.4.1 A3.1—Manage Airworthiness Inspections 5.4.2 A3.2—Review FAA Order 8300 5.4.3 A3.3—Review FAA Operator Information 5.4.4 A3.4—Perform Airworthiness Inspection 5.4.5 A3.5—Perform Airworthiness Investigation 5.4.6 A3.6—Provide Airworthiness Inspection Resource 5.5 A4—Provide Resources 5.5.1 A4.1—Maintain Inspection Resources 5.5.2 A4.2—Maintain and Provide Automation Needs 5.5.3 A4.3—Provide Training 5.5.4 A4.4—Provide Staffing for Inspection Resources 14 CFR PART 137 RELATED INFORMATION 6.1 Systems and Databases

LIST OF FIGURES

Figur	re	Page
1	IDEF0 Model View	3
2	A Typical IDEF0 Diagram Hierarchy	4
3	Function Decomposition Philosophy	6
4	Typical Diagram Template	7
5	Control Patterns	7

LIST OF TABLES

Table		
1	Databases and Systems	48

LIST OF ACRONYMS

AC Advisory circular

ACO Aircraft Certification Office **AFS** Flight Standards Service **ASA** Aviation safety assistant ASI Aviation safety inspector CAM Civil Aeronautics Manuals **CAOP** Congested Area Operations Plan **CFR** Code of Federal Regulations **Enforcement Information System** EIS **FAA** Federal Aviation Administration **FBI** Federal Bureau of Investigation **FSDO** Flight Standards District Office

GA General Aviation

ICOM
 Input, Control, Output, and Mechanism
 IDEF0
 Integrated Definition Function Model
 ISIS
 Integrated Safety Information System
 OM
 14 CFR Part 137 Oversight Model

Ops Operations

NTSB National Transportation Safety Board
PTRS Program Tracking Reporting Subsystem
SAGA Systems approach to general aviation
SASO System approach for safety oversight
SPAS Safety Performance Analysis System
TSA Transportation Security Administration

VIS Vital Information Subsystem

EXECUTIVE SUMMARY

Rigorous, defensible analyses, based on a validated system model and standardized objective data, are necessary integral components of the system safety approach to identifying, measuring, and predicting safety-related problems. The foundation for an effective systems safety approach is a requirements analysis to determine the capabilities that an air carrier oversight system must have and a functional analysis to describe the structure of an air carrier. Important aspects of the functional analysis are a description of the elements of the air carrier's functions and an analysis of the relationship between these elements. These analyses form the foundation or basic architecture upon which other task areas are based, i.e., hazard analysis, performance measure, and risk indicator design. The output of a functional analysis is a system-engineering model that presents, in graphical format, the major processes of the system—identifying inputs, outputs, mechanisms, and controls.

Representatives from the Federal Aviation Administration (FAA), Flight Standards District Office, and other Subject Matter Experts met several times during 2003-2004 to develop a system-engineering model of the generic functions of FAA oversight of the Title 14 Code of Federal Regulations (CFR) Part 137 agricultural aircraft operations. From these meetings, the team developed the 14 CFR Part 137 Oversight Model (OM).

OM, Version 2.0, serves as the foundation for the FAA research and engineering and development efforts to support a system safety approach to aviation safety oversight. This model will be used in the development of safety performance measures and risk indicators; work processes to support the collection of data to be used in analysis; and analytical methods, including information presentation.

The model also provides an important communications bridge between the FAA and the aviation industry during this evolution of a system safety approach. For example, an agricultural aircraft operator has its own internal models of their processes. By developing an external model, in which industry and FAA participants identify and agree upon the functions and definitions of the model, a standard model is put forward that provides a common point of reference. Thus, everyone is looking at the same model, using the same definitions, and talking about the same thing.

The model structure uses the Integrated Definition Function Model format, as defined in Federal Information Processing Standards Publication 183, and as captured in an Allfusion Process Modeler, a commercial product from Platinum Technologies. With this structured language and tool, the analysis of critical system interactions and potential system vulnerabilities will be enhanced and clarified. The descriptions of complex operations will be explicit and open.

The OM concentrates on the following key processes:

- Operational management
- Operations inspections
- Airworthiness inspections
- Operational resources provision

1. INTRODUCTION.

The Federal Aviation Administration (FAA) conducted research and development in support of making Flight Standards Service (AFS) oversight more systematic, effective, efficient, and risk-based. To accomplish the above, in support of System Approach for Safety Oversight (SASO) combined with Systems Approach to General Aviation (SAGA) requirements from General Aviation (GA) and Commercial Division (AFS-800), a set of requirements specific to Title 14 Code of Federal Regulations (CFR) Part 137 were developed. The requirement GA-02 "FAA Oversight As-Is Model Development" from the SASO GA research, engineering, and development requirements, fiscal year 2004-2006 requires an oversight model of the 14 CFR Part 137—Agricultural Aircraft Operations be developed.

SAGA is AFS-800's program for fostering aviation safety and awareness through the joint collaboration of government and industry in the application of new technology, training and education, and decision-making. The philosophy underlying SAGA is that of system safety, which involves understanding how the various components of the aviation system, people and organizations, equipment and technology, and the regulatory environment interact. System safety involves understanding how these components function and interact, which includes:

- Identifying the potential hazards of the system;
- Estimating the impact and likelihood of those hazards occurring;
- Designing controls to reduce the occurrence of accident causal factors, and defenses to mitigate the effects of accidents should they occur; and
- Monitoring those controls and defenses to ensure that they are being implemented, and that they are effective in their intent.

Rigorous, defensible analyses, based on a validated system model and standardized and objective data, are necessary integral components of the system safety approach to identifying, measuring, and predicting safety-related problems. The foundation for an effective systems safety approach is a requirements analysis to determine the capabilities that an agricultural aircraft operator oversight system must have and a functional analysis to describe the structure of a current oversight system. Important aspects of the functional analysis are a description of the elements of the oversight functions and an analysis of the relationships between these elements. These analyses form the foundation or basic architecture upon which other task areas are based, i.e., hazard analysis, performance measure, and risk indicator design. The output of a functional analysis is a system-engineering model that presents, in graphical format, the major processes of the system—identifying inputs, outputs, mechanisms, and controls.

1.1 14 CFR PART 137 OVERSIGHT MODEL.

Representatives from the FAA, Flight Standard District Office (FSDO), and other subject matter experts met several times during 2003-2004 to develop a system-engineering model of the

generic functions of FAA oversight of the 14 CFR Part 137 agricultural aircraft operations. From these meetings, the team developed the 14 CFR Part 137 Oversight Model (OM).

OM, Version 2.0, serves as the foundation for FAA Research, Engineering and Development efforts to support a system safety approach to aviation safety oversight. This model will be used in the development of safety performance measures and risk indicators; work processes to support the collection of data to be used in analysis; and analytical methods, including information presentation.

The model also provides an important communications bridge between the FAA and the aviation industry during this evolution of a system safety approach. For example, an agricultural aircraft operator has its own internal models of their processes. By developing an external model, in which industry and FAA participants identify and agree upon the functions and definitions of the model, then a standard model is put forward that provides a common point of reference. Thus, everyone is looking at the same model, using the same definitions, and talking about the same thing.

The model structure uses the Integrated Definition Function Model (IDEF0) format, as defined in Federal Information Processing Standards Publication 183, and as captured in an Allfusion Process Modeler, a commercial product from Computer Associates. With this structured language and tool, the analysis of critical system interactions and potential system vulnerabilities will be enhanced and clarified. The descriptions of complex operations will be explicit and open.

1.2 OBJECTIVES.

The goals of the OM effort are to

- develop a system engineering model, using the IDEF0 standard, which demonstrates the
 processes and inter-relationships of the FAA oversight functions to be used in the
 development of performance measures and risk indicators.
- design controls to reduce the occurrence of accident causal factors and defenses to mitigate the effects of accidents should they occur.

The OM is critical for understanding the impact of change related to agricultural aircraft operators and FAA activities as well as the interactions among the elements of the agricultural aircraft operators and other programs.

2. IDEF0 NOTATION.

IDEF0 (pronounced eye-deaf-zero) is a modeling technique used to create a description of a business or organizational process and is used where process or functional models are beneficial in analyzing how the organization or system currently conducts its business.

IDEF0 is a graphical approach using boxes and arrows to describe a process. The boxes represent activities conducted within the organization or system and arrows represent objects or information involved in the activities. The arrows are subdivided into four categories.

- Inputs: Items consumed by the activity, e.g., materials and information
- Controls: Documentation that guides, regulates, or influences the activity, e.g., rules, regulations, policies, and procedures
- Outputs: Items produced by the activity, e.g., material and information
- Mechanisms: Entities used to realize the activity, e.g., people, organizations, systems, facilities, and equipment

In IDEF0 terminology, these are called ICOMs, an acronym for Input, Control, Output, and Mechanism. ICOMs connect to an activity box from different sides of the box: Controls connect at the top, Inputs connect at the left, Outputs connect at the right, and Mechanisms connect at the bottom as shown in figure 1.

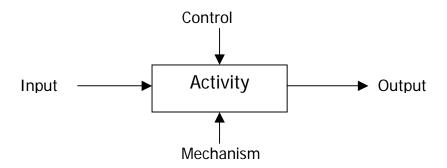


Figure 1. IDEF0 Model View

An IDEF0 model starts by representing the whole system as a simple activity in a single diagram called the context activity. A diagram is the detailed description of a certain activity (or function) whose name (Title) and activity number (Node) in the activity hierarchy are shown at the bottom of each diagram. A diagram consists of boxes representing the activities (functions) and arrows representing the information or objects interacting with the related activities.

The context diagram, the A-0 diagram, pronounced A minus 0 diagram, defines the context and boundary of the system the model addresses. Only one box called the context activity appears on this diagram representing the function of the system, and arrows entering or exiting this box indicate interactions between the system and the external environment. When the context activity is decomposed into detailed levels, those arrows will automatically link to corresponding subactivities and appear on the subdiagrams. Each of these subactivities will be further decomposed into its own subactivities, using subdiagrams to describe the process in more detail. This decomposition process continues until each activity has enough detail to evaluate all the relevant processes. These hierarchical diagrams comprise the core of the IDEF0 model.

Figure 2 shows a typical decomposition diagram hierarchy.

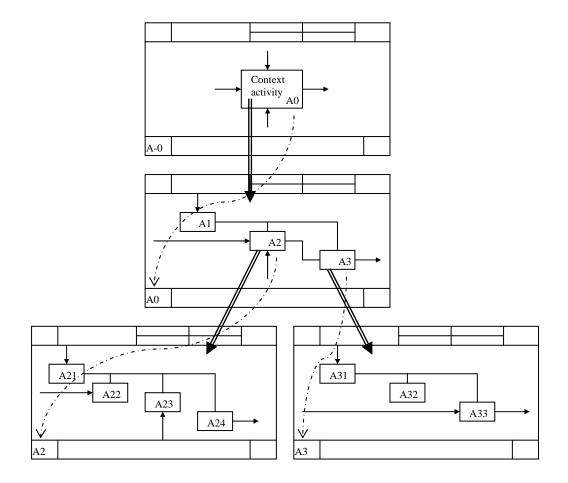


Figure 2. A Typical IDEF0 Diagram Hierarchy

3. 14 CFR PART 137 OVERSIGHT MODEL DESCRIPTION.

3.1 MODEL DEFINITION.

Model Name: 14 CFR Part 137 Oversight Model (OM)

Author Name: OM Team

Status: Final (Version 2.0) Last Revision Date: March 03, 2006

3.1.1 Purpose.

The purpose of the OM is to develop a system-engineering model of the generic functions of FAA oversight of the 14 CFR Part 137 agricultural aircraft operation activities and interactions among functions used to accomplish those activities.

3.1.2 Scope.

The OM concentrates on the following key processes:

- Operational management
- Operations inspections
- Airworthiness inspections
- Operational resources provision

3.1.3 Viewpoint.

The model is developed from the FAA viewpoint.

3.1.4 Audience.

The model is intended for those who have a basic understanding or background in the oversight process.

3.2 14 CFR PART 137 OVERSIGHT MODEL DEVELOPMENT PHILOSOPHY.

Through the OM development, the following conventions are applied to make the model easily read and consistent.

3.2.1 Activity (function) Decomposition.

The context activity, which is used to describe the system itself, of OM, is defined as "Perform 14 CFR Part 137 Oversight." Here, Perform 14 CFR Part 137 Oversight means the oversight of an agricultural aircraft operator. The context activity, Perform 14 CFR Part 137 Oversight, is decomposed into four subactivities that comprise a child diagram relative to the parent diagram:

- Manage oversight operations
- Perform operations inspections
- Perform airworthiness inspections
- Provide resources

Each subactivity on this child diagram is further decomposed into a more detailed level on its own subordinate diagrams, based on the philosophy defined in figure 3.

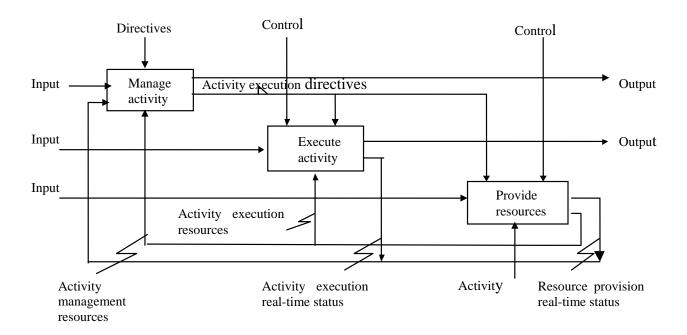


Figure 3. Function Decomposition Philosophy

- The Manage activity provides activity management functions including the scheduling, directing, and coordination of the execution of other activities on the same diagram and also identifies resource requirements to conduct those activities.
- The Execute subactivity performs the function of converting the input into the output under the directives from the Manage Activity and with the resources from the resources provision function.
- The Provide resources selects, allocates, and supplies any necessary resources to support the above two activities. Here, resources means the components necessary for the successful accomplishment of certain functions. The components are defined as properly trained and certified personnel, adequate facilities, required information, and material support.
- Provide resources on figure 3 does not need to be shown on each diagram. Therefore, the decomposition template used for function decomposition is shown as figure 4.

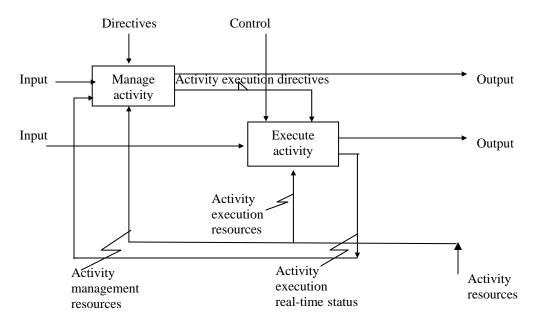


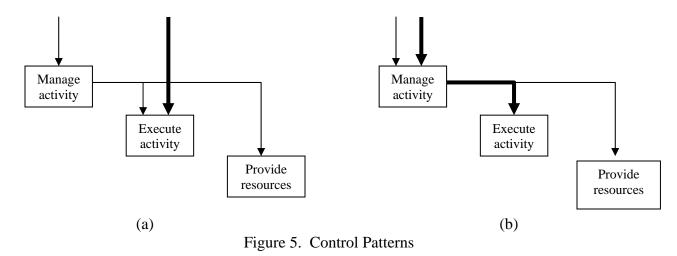
Figure 4. Typical Diagram Template

3.2.2 Directives Arrows.

Each function has a directives arrow as its control to regulate its execution process. The directives include policies, procedures, or instructions and can exist in various forms, such as manuals, e-mail, notes, phone call, and conversation.

3.2.3 Control Patterns.

There are two kinds of linking patterns, as shown in figure 5, of the control arrows imported from parent level of function in the OM.



The Control arrow (bold) is either directly linked to a executive function to direct its execution (as shown in figure 5(a)) or linked to management function first and then through its Output—function execution directives to direct the execution of the function (as shown in figure 5(b)).

Figure 5(a) shows that the control information can be directly applied to or directly used by the execute function, whereas figure 5(b) indicates the control information needs to be converted or interpreted into directives before it is used to direct the execution of activity. For example, FAA regulations cannot be directly applied to the execution of the agricultural aircraft operational functions, they need to be converted through management function into the operator policies or procedures before it is used to regulate the executive functions.

4. 14 CFR PART 137 OVERSIGHT MODEL ACTIVITY HIERARCHY.

The activity number in the front of each activity shows its location in the activity hierarchy. Examples include:

- A-0 is the context activity defining the system, and it is located at the top of the activity hierarchy.
- A1, A2, A3, and A4 are the subactivities decomposed from A0 and are located on the first level of the decomposition hierarchy.
- A2.1, A2.2, A2.3, A2.4, A2.5, and A2.6 are subactivities decomposed from A2 and are located on the second level of the decomposition hierarchy.
- A3.1, A3.2, A3.3, A3.4, A3.5, and A3.6 are subactivities decomposed from A3 and are located on the third level of the decomposition hierarchy.
- A4.1, A4.2, A4.3, and A4.4 are subactivities decomposed from A4 and are located on the third level of the decomposition hierarchy.

In the IDEF0 model, a set of subactivities directly decomposed from a parent activity comprises a diagram that shows the interaction between those activities.

The activity hierarchy of the 14 CFR Part 137 OM is presented below.

A0 Perform 14 CFR Part 137 Oversight

A1 Manage oversight operations

A2 Perform operations inspections

A2.1 Manage operations inspections

A2.2 Review FAA Order 8700

A2.3 Review operator information

A2.4 Perform operation inspection

A2.5 Perform investigation

A2.6 Provide operation inspection resource

A3 Perform airworthiness inspections

A3.1 Manage airworthiness inspections

A3.2 Review FAA Order 8300

A3.3 Review operator information

A3.4 Perform airworthiness inspection

A3.5 Perform airworthiness investigation

A3.6 Provide airworthiness inspection resource

A4 Provide resource

A4.1 Maintain inspection resources

A4.2 Maintain and provide automation needs

A4.3 Provide training

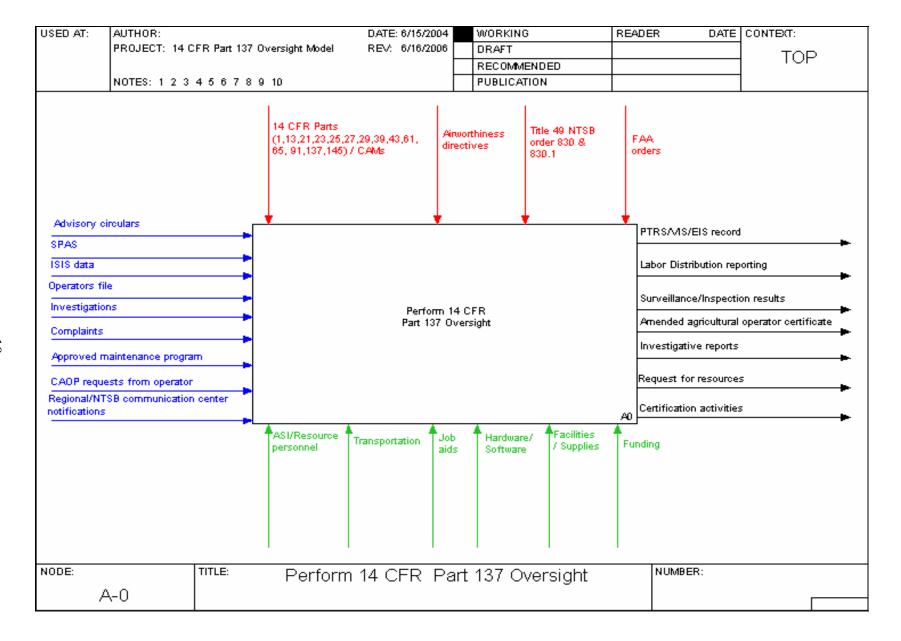
A4.4 Provide staffing for inspection resources

5. MODEL DIAGRAMS.

The IDEF0 diagrams of the OM, showing the interactions among activities and generated by the AllFusion Process Modeler, are presented in this section. Each diagram is followed by the definitions of activities and the ICOMs appearing on the diagram.

The following conventions are used for reading facilitation purposes.

- Arrow and text in Red color are referred to as Control to its destination function.
- Arrow and text in Blue color are referred to as Input to its destination function.
- Arrow and text in Green color are referred to as Mechanism to its destination function.
- Arrow and text in Black color are referred to as Output to the outside environment of system.



_

5.1 A-0—PERFORM 14 CFR PART 137 OVERSIGHT.

This includes the oversight of an aerial application aircraft for the purpose of dispensing any product/dispersant.

This is the context diagram, which defines the system and the system boundaries. The information/objects linking to this activity represent the interaction between the aerial application business and the FAA oversight.

The outputs of this activity, shown as arrows exiting from the right side of the activity box, are:

- PTRS/VIS/EIS record
- Labor Distribution reporting
- Surveillance/Inspection results
- Amended agricultural operator certificate
- Investigative reports
- Request for resources
- Certification activities

The inputs used to generate these outputs, shown as arrows entering the left side of the activity box, are:

- Advisory circulars
- SPAS
- ISIS data
- Operators file
- Investigations
- Complaints
- Approved maintenance program
- CAOP requests from operator
- Regional/NTSB communication center notifications

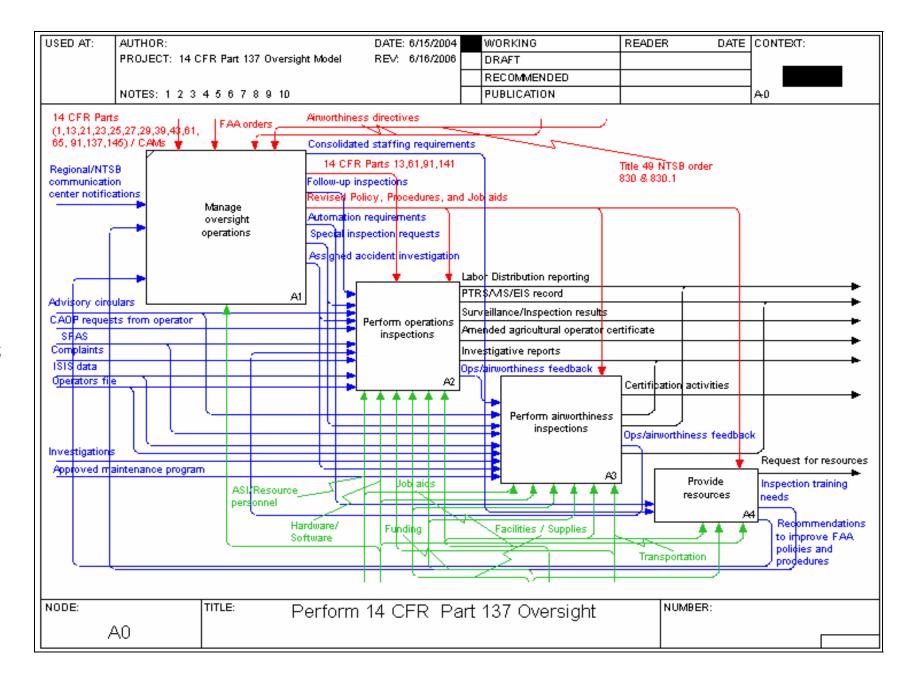
The execution of this activity is governed by a set of regulations or constraints related to the government, aerial application operator, and its environment, etc. They are represented as controls entering the top of the activity box and include:

- 14 CFR Parts (1,13,21,23,25,27,29,39,43,61, 65, 91,137,145)/CAMs
- Airworthiness directives
- Title 49 NTSB Order 830 & 830.1
- FAA orders

A set of resources are needed to support the execution of the activity that are considered as mechanisms entering the bottom side of the activity box in the diagram:

- ASI/Resource personnel
- Transportation
- Job aids
- Hardware/Software
- Facilities/Supplies
- Funding

The ICOMs appearing on this A-0 diagram will automatically appear on its child diagrams throughout the activity decomposition but will be connected to more specific activities since the decomposition is on a more detailed level.



14

5.2 A0—PERFORM 14 CFR PART 137 OVERSIGHT.

This includes the oversight of an aerial application aircraft for the purpose of dispensing any product/dispersant.

Input Name: Advisory circulars

Input Definition: Document that advises operators how to accomplish a specific task.

Control Name: 14 CFR Parts (1,13, 21, 23, 25, 27, 29, 39, 43, 61, 65, 91, 137, 145)/CAMs Control Definition: FAA regulatory requirements that regulate the 14 CFR Part 137 industry.

Output Name: PTRS/VIS/EIS record

Output Definition: Data generated as a result of certification/inspection/enforcement activities.

Mechanism Name: ASI/Resource personnel

Mechanism Definition: The personnel necessary for performing the inspection/surveillance activities. This includes support personnel such as Aviation Safety Assistants (ASA), supervisors, managers, region/national resource specialists, agricultural association personnel, Aircraft Certification Office (ACO) personnel.

Input Name: SPAS

Input Definition: Identifies discrepancies within an operator.

Control Name: Airworthiness directives

Control Definition: Document that directs operators how to accomplish a specific task.

Output Name: Labor Distribution reporting

Output Definition: A database that ASIs and other FAA employees use to record the time, attendance, and activities.

Mechanism Name: Transportation

Mechanism Definition: Any government vehicle used for inspection or investigation.

Input Name: ISIS data

Input Definition: Provides vital information on aircraft, airmen, and operators. It will also provide accident/incident records as well.

Control Name: Title 49 NTSB Order 830 & 830.1

Control Definition: Notification and reporting of aircraft accidents or incidents and overdue aircraft and preservation of aircraft wreckage, mail cargo, and records.

This part contains rules pertaining to:

- a. Initial notification and later reporting of aircraft incidents and accidents and certain other occurrences in the operation of aircraft, wherever they occur, when they involve civil aircraft of the United States; when they involve certain public aircraft, as specified in this part, wherever they occur; and when they involve foreign civil aircraft where the events occur in the United States, its territories, or its possessions.
- b. Preservation of aircraft wreckage, mail, cargo, and records involving all civil and certain public aircraft accidents, as specified in this part, in the United States and its territories or possessions.

Output Name: Surveillance/Inspection results

Output Definition: Data generated during the inspection/surveillance activities.

Mechanism Name: Job aids

Mechanism Definition: Checklists on how to conduct an investigation or inspection.

Input Name: Operators file

Input Definition: This provides Integrated Safety Information System (ISIS) data, Safety Performance Analysis System (SPAS) data, and correspondence between the FAA and the operator.

Control Name: FAA orders

Control Definition: A set of documents that directs and provides guidance to ASIs in their certification/inspection/surveillance activities.

Output Name: Amended agricultural operator certificate

Output Definition: The changes made on an agricultural operator certificate.

Mechanism Name: Hardware/Software

Mechanism Definition: Any tools necessary to perform or accomplish a task such as computer systems and software programs.

16

Input Name: Investigations

Input Definition: The act of reviewing and fact finding as a result of an incident, accident, or an occurrence.

Output Name: Investigative reports

Output Definition: Accident, enforcement, and all other reports pertinent to the investigation.

Mechanism Name: Facilities/Supplies

Mechanism Definition: Facilities and supplies required to perform the oversight activities.

Input Name: Complaints

Input Definition: Formal allegation against an operator/airmen or other entity affecting aviation.

Output Name: Request for resources

Output Definition: Any requests made for resources to accomplish a task.

Mechanism Name: Funding

Mechanism Definition: Budget to accomplish 14 CFR Part 137 oversight.

Input Name: Approved maintenance program

Input Definition: FAA approved maintenance program for 14 CFR Part 137 aircraft.

Output Name: Certification activities

Output Definition: The actions on the certificate performed as a result of surveillance/inspection (e.g., certificate updates/suspensions/revocations, etc.).

Input Name: CAOP requests from operator

Input Definition: These requests are plans that 14 CFR Part 137 operators must submit to FSDO prior to operating in a congested area.

Input Name: Regional/NTSB communication center notifications Input Definition: Accident/incident notifications to the FSDOs.

5.2.1 A1—Manage Oversight Operations.

Activity Definition: This function directs, schedules, and coordinates the following component activities of the oversight operations: perform operations inspections, perform airworthiness inspections, and provide resources.

Input Name: Regional/NTSB communication center notifications Input Definition: Accident/incident notifications to the FSDOs.

Control Name: 14 CFR Parts (1, 13, 21, 23, 25, 27, 29, 39, 43, 61, 65, 91, 137, 145)/CAMs Control Definition: FAA regulatory requirements that regulate the 14 CFR Part 137 industry.

Output Name: Consolidated staffing requirements

Output Definition: Combined staffing requirements to accomplish oversight activities.

Mechanism Name: Hardware/Software

Mechanism Definition: Any tools necessary to perform or accomplish a task such as computer systems and software programs.

Input Name: Inspection training needs

Input Definition: Any training needs required to accomplish a task.

Control Name: FAA orders

Control Definition: A set of documents that directs and provides guidance to ASIs in their certification/inspection/surveillance activities.

Output Name: 14 CFR Parts 13, 61, 91, 141

Output Definition:

- 14 CFR Part 13—Investigative and Enforcement Procedures
- 14 CFR Part 61—Certification: Pilots, Flight Instructors, and Ground Instructors
- 14 CFR Part 91—General Operating and Flight Rules
- 14 CFR Part 141—Pilot Schools

Input Name: Request for resources

Input Definition: Any requests made for resources to accomplish a task.

Control Name: Airworthiness directives

Control Definition: Document that directs operators on how to accomplish a specific task.

Output Name: Follow-up inspections

Output Definition: An inspection generated as a result of previous investigation or inspection.

Input Name: Recommendations to improve FAA policies and procedures

Input Definition: A set of propositions to improve the FAA policies and procedures.

Control Name: Title 49 NTSB Order 830 & 830.1

Control Definition: Title 49 NTSB Part 830—Notification and reporting of aircraft accidents or incidents and overdue aircraft and preservation of aircraft wreckage, mail cargo, and records.

This part contains rules pertaining to:

a. Initial notification and later reporting of aircraft incidents and accidents and certain other occurrences in the operation of aircraft, wherever they occur, when they involve civil aircraft of the United States; when they involve certain public aircraft, as specified in this part, wherever they occur; and when they involve foreign civil aircraft where the events occur in the United States, its territories, or its possessions.

b. Preservation of aircraft wreckage, mail, cargo, and records involving all civil and certain public aircraft accidents, as specified in this part, in the United States and its territories or possessions.

Output Name: Revised Policy, Procedures, and Job aids

Output Definition: FAA guidance and instructions for inspectors during the performance of their duties as a result of inspector feedback.

Output Name: Automation requirements

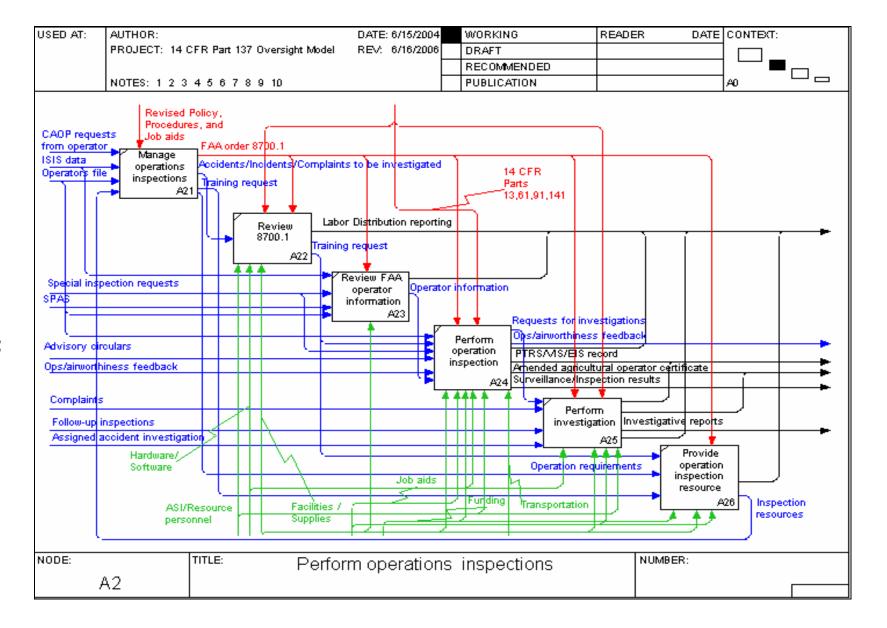
Output Definition: Requirements for automation activities.

Output Name: Special inspection requests

Output Definition: Any requests other than the normal inspection/surveillance activities (e.g., requests from Transportation Security Administration (TSA), Federal Bureau of Investigation (FBI) etc.).

Output Name: Assigned accident investigation

Output Definition: Accident investigations assigned by management.



2

5.3 A2—PERFORM OPERATIONS INSPECTIONS.

This function involves performing operations inspection and investigation of 14 CFR Part 137 certificate holders.

Input Name: Follow-up inspections

Input Definition: An inspection generated as a result of previous investigation or inspection.

Control Name: 14 CFR Parts 13, 61, 91, 141

Control Definition:

• 14 CFR Part 13—Investigative and Enforcement Procedures

• 14 CFR Part 61—Certification: Pilots, Flight Instructors, and Ground Instructors

• 14 CFR Part 91—General Operating and Flight Rules

• 14 CFR Part 141—Pilot Schools

Output Name: Labor Distribution reporting

Output Definition: A database that ASIs and other FAA employees use to record the time, attendance, and activities.

Mechanism Name: ASI/Resource personnel

Mechanism Definition: The personnel necessary for performing the inspection/surveillance activities. This includes support personnel such as ASA, supervisors, managers, region/national resource specialists, agricultural association personnel, and ACO personnel.

Input Name: Special inspection requests

Input Definition: Any requests other than the normal inspection/surveillance activities (e.g., requests from TSA, FBI, etc.).

Control Name: Revised Policy, Procedures, and Job aids

Control Definition: FAA guidance and instructions for inspectors during the performance of their duties as a result of inspector feedback.

Output Name: PTRS/VIS/EIS record

Output Definition: Data generated as a result of certification/inspection/enforcement activities.

Mechanism Name: Hardware/Software

Mechanism Definition: Any tools necessary to perform or accomplish a task such as computer systems and software programs.

Input Name: Advisory circulars

Input Definition: Document that advises operators how to accomplish a specific task.

Output Name: Surveillance/Inspection results

Output Definition: Data generated during the inspection/surveillance activities.

Mechanism Name: Transportation

Mechanism Definition: Any government vehicle used for inspection or investigation.

Input Name: Assigned accident investigation

Input Definition: Accident investigations assigned by management.

Output Name: Amended agricultural operator certificate

Output Definition: The changes made on an agricultural operator certificate.

Mechanism Name: Facilities/Supplies

Mechanism Definition: Facilities and supplies required to perform the oversight activities.

Input Name: CAOP requests from operator

Input Definition: These requests are plans that 14 CFR Part 137 operators must submit to FSDO prior to operating in a congested

area.

Output Name: Investigative reports

Output Definition: Accident, enforcement, and all other reports pertinent to the investigation.

Mechanism Name: Funding

Mechanism Definition: Budget to accomplish 14 CFR Part 137 oversight.

Input Name: SPAS

Input Definition: Identifies discrepancies within an operator.

7

Output Name: Ops/airworthiness feedback

Output Definition: Communications between operations and airworthiness inspectors.

Mechanism Name: Job aids

Mechanism Definition: Checklists on how to conduct an investigation or inspection.

Input Name: Ops/airworthiness feedback

Input Definition: Communications between operations and airworthiness inspectors.

Input Name: Complaints

Input Definition: Formal allegation against an operator/airmen or other entity affecting aviation.

Input Name: ISIS data

Input Definition: Provides vital information on aircraft, airmen, and operators. It will also provide accident/incident records as well.

Input Name: Operators file

Input Definition: This provides ISIS data, SPAS data and correspondence between the FAA and the operator.

5.3.1 A2.1—Manage Operations Inspections.

This function directs, schedules, and coordinates the following component activities of the perform operations inspections: Review FAA Order 8700, review FAA operator information, perform operation inspection, perform investigation and provide operation inspection resource.

Input Name: CAOP requests from operator

Input Definition: These requests are plans that 14 CFR Part 137 operators must submit to FSDO prior to operating in a congested area.

Control Name: Revised Policy, Procedures, and Job aids

Control Definition: FAA guidance and instructions for inspectors during the performance of their duties as a result of inspector feedback.

Output Name: FAA Order 8700.1

Output Definition: General Aviation Operations Inspector's Handbook.

Input Name: ISIS data

Input Definition: Provides vital information on aircraft, airmen, and operators. It will also provide accident/incident records as well.

Output Name: Accidents/Incidents/Complaints to be investigated

Output Definition: Investigations pertaining to any 14 CFR Part 137 Accident/Incident/Complaint.

Input Name: Operators file

Input Definition: This provides ISIS data, SPAS data, and correspondence between the FAA and the operator.

Output Name: Training request

Output Definition: Management identifies and requests training for personnel that accomplish 14 CFR Part 137 oversight.

Input Name: Inspection resources

Input Definition: Resources provided to accomplish 14 CFR Part 137 oversight.

Output Name: Operation requirements

Output Definition: Resources that the management identifies to accomplish 14 CFR Part 137 oversight.

5.3.2 A2.2—Review FAA Order 8700.1.

Reviewing FAA Order 8700.1 to accurately accomplish operation inspections and investigations.

Input Name: FAA Order 8700.1

Input Definition: General Aviation Operations Inspector's Handbook.

Control Name: 14 CFR Parts 13, 61, 91, 141

Control Definition:

- 14 CFR Part 13—Investigative and Enforcement Procedures
- 14 CFR Part 61—Certification: Pilots, Flight Instructors, and Ground Instructors
- 14 CFR Part 91—General Operating and Flight Rules
- 14 CFR Part 141—Pilot Schools

Output Name: Labor Distribution reporting

Output Definition: A database that ASIs and other FAA employees use to record the time, attendance, and activities.

Mechanism Name: ASI/Resource personnel

Mechanism Definition: The personnel necessary for performing the inspection/surveillance activities. This includes support personnel such as ASA, supervisors, managers, region/national resource specialists, agricultural association personnel, and ACO personnel.

Input Name: Accidents/Incidents/Complaints to be investigated

Input Definition: Investigations pertaining to any 14 CFR Part 137 Accident/Incident/Complaint.

Output Name: Training request

Output Definition: Management identifies and requests training for personnel that accomplish 14 CFR Part 137 oversight.

Mechanism Name: Hardware/Software

Mechanism Definition: Any tools necessary to perform or accomplish a task such as computer systems and software programs.

Mechanism Name: Facilities/Supplies

Mechanism Definition: Facilities and supplies required to perform the oversight activities.

5.3.3 A2.3—Review Operator Information.

Reviewing operation files, ISIS data, SPAS data, and other available data sources.

Input Name: ISIS data

Input Definition: Provides vital information on aircraft, airmen, and operators. It will also provide accident/incident records as well.

Output Name: Labor Distribution reporting

Output Definition: A database that ASIs and other FAA employees use to record the time, attendance, and activities.

Mechanism Name: Facilities/Supplies

Mechanism Definition: Facilities and supplies required to perform the oversight activities.

Input Name: FAA Order 8700.1

Input Definition: General Aviation Operations Inspector's Handbook.

Output Name: Operator information

Output Definition: Any information on the 14 CFR Part 137 agricultural aircraft operator related to certification, operation, etc.

Input Name: Special inspection requests

Input Definition: Any requests other than the normal inspection/surveillance activities (e.g., requests from TSA, FBI, etc.).

Input Name: SPAS reports

Input Definition: Identifies discrepancies within an operator.

Input Name: Operators file

Input Definition: This provides ISIS data, SPAS data, and correspondence between the FAA and the operator.

5.3.4 A2.4—Perform Operation Inspection.

This function involves performing operations inspection of 14 CFR Part 137 certificate holders.

Input Name: Operators file

Input Definition: This provides ISIS data, SPAS data, and correspondence between the FAA and the operator.

Control Name: FAA Order 8700.1

Control Definition: General Aviation Operations Inspector's Handbook.

Output Name: Requests for investigations

Output Definition: Any requests made for investigation of an accident/incident/complaint.

Mechanism Name: Facilities/Supplies

Mechanism Definition: Facilities and supplies required to perform the oversight activities.

Input Name: Training request

Input Definition: Management identifies and requests training for personnel that accomplish 14 CFR Part 137 oversight.

Control Name: 14 CFR Parts 13, 61, 91, 141

Control Definition:

• 14 CFR Part 13—Investigative and Enforcement Procedures

- 14 CFR Part 61—Certification: Pilots, Flight Instructors, and Ground Instructors
- 14 CFR Part 91—General Operating and Flight Rules

• 14 CFR Part 141—Pilot Schools

Output Name: Ops/airworthiness feedback

Output Definition: Communications between operations and airworthiness inspectors.

Mechanism Name: Job aids

Mechanism Definition: Checklists on how to conduct an investigation or inspection.

Input Name: Special inspection requests

Input Definition: Any requests other than the normal inspection/surveillance activities (e.g., requests from TSA, FBI, etc.).

Output Name: Labor Distribution reporting

Output Definition: A database that ASIs and other FAA employees use to record the time, attendance, and activities.

Mechanism Name: Funding

27

Mechanism Definition: Budget to accomplish 14 CFR Part 137 oversight.

Input Name: Advisory circulars

Input Definition: Document that advises operators how to accomplish a specific task.

Output Name: PTRS/VIS/EIS record

Output Definition: Data generated as a result of certification/inspection/enforcement activities.

Mechanism Name: Hardware/Software

Mechanism Definition: Any tools necessary to perform or accomplish a task such as computer systems and software programs.

Input Name: Ops/airworthiness feedback

Input Definition: Communications between operations and airworthiness inspectors.

Output Name: Amended agricultural operator certificate

Output Definition: The changes made on an agricultural operator certificate.

Mechanism Name: ASI/Resource personnel

Mechanism Definition: The personnel necessary for performing the inspection/surveillance activities. This includes support personnel such as ASA, supervisors, managers, region/national resource specialists, agricultural association personnel, and ACO personnel.

Input Name: Operator information

Input Definition: Any information on the 14 CFR Part 137 agricultural aircraft operator related to certification, operation, etc.

Output Name: Surveillance/Inspection results

Output Definition: Data generated during the inspection/surveillance activities.

Mechanism Name: Transportation

Mechanism Definition: Any government vehicle used for inspection or investigation.

5.3.5 A2.5—Perform Investigation.

This function involves performing operations investigation of 14 CFR Part 137 certificate holders.

Input Name: Requests for investigations

Input Definition: Any requests made for investigation of an accident/incident/complaint.

Control Name: FAA Order 8700.1

Control Definition: General Aviation Operations Inspector's Handbook.

Output Name: PTRS/VIS/EIS record

Output Definition: Data generated as a result of certification/inspection/enforcement activities.

Mechanism Name: Hardware/Software

Mechanism Definition: Any tools necessary to perform or accomplish a task such as computer systems and software programs.

28

29

Input Name: Complaints

Input Definition: Formal allegation against an operator/airmen or other entity affecting aviation.

Control Name: 14 CFR Parts 13, 61, 91, 141

Control Definition:

• 14 CFR Part 13—Investigative and Enforcement Procedures

• 14 CFR Part 61—Certification: Pilots, Flight Instructors, and Ground Instructors

• 14 CFR Part 91—General Operating and Flight Rules

• 14 CFR Part 141—Pilot Schools

Output Name: Amended agricultural operator certificate

Output Definition: The changes made on an agricultural operator certificate.

Mechanism Name: Facilities/Supplies

Mechanism Definition: Facilities and supplies required to perform the oversight activities.

Input Name: Follow-up inspections

Input Definition: An inspection generated as a result of previous investigation or inspection.

Output Name: Investigative reports

Output Definition: Accident, enforcement, and all other reports pertinent to the investigation.

Mechanism Name: Job aids

Mechanism Definition: Checklists on how to conduct an investigation or inspection.

Input Name: Assigned accident investigation

Input Definition: Accident investigations assigned by management.

Output Name: Labor Distribution reporting

Output Definition: A database that ASIs and other FAA employees use to record the time, attendance, and activities.

Mechanism Name: ASI/Resource personnel

Mechanism Definition: The personnel necessary for performing the inspection/surveillance activities. This includes support personnel such as ASA, supervisors, managers, region/national resource specialists, agricultural association personnel, and ACO personnel.

<u>5.3.6 A2.6—Provide Operation Inspection Resource.</u>

This function acquires and allocates aircraft, personnel, parts, materials, facilities, equipment, automation, information infrastructure, tools, budget, publications, and any other required resources to support the execution of the operation inspection.

Input Name: Training request

Input Definition: Management identifies and requests training for personnel that accomplish 14 CFR Part 137 oversight.

Control Name: FAA Order 8700.1

Control Definition: General Aviation Operations Inspector's Handbook.

Output Name: Labor Distribution reporting

Output Definition: A database that ASIs and other FAA employees use to record the time, attendance, and activities.

Mechanism Name: Funding

Mechanism Definition: Budget to accomplish 14 CFR Part 137 oversight.

Input Name: Operation requirements

Input Definition: Resources that the management identifies to accomplish 14 CFR Part 137 oversight.

Output Name: Inspection resources

Output Definition: Resources provided to accomplish 14 CFR Part 137 oversight.

Mechanism Name: Facilities/Supplies

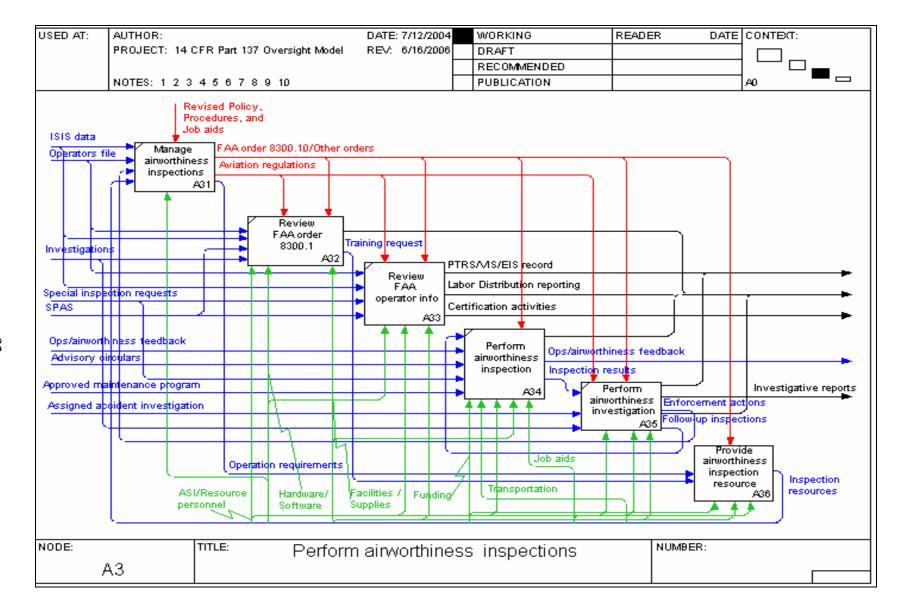
Mechanism Definition: Facilities and supplies required to perform the oversight activities.

Input Name: Training request

Input Definition: Management identifies and requests training for personnel that accomplish 14 CFR Part 137 oversight.

Mechanism Name: Job aids

Mechanism Definition: Checklists on how to conduct an investigation or inspection.



5.4 A3—PERFORM AIRWORTHINESS INSPECTIONS.

This function involves performing airworthiness inspection and investigation of 14 CFR Part 137 certificate holders.

Input Name: Ops/airworthiness feedback

Input Definition: Communications between operations and airworthiness inspectors.

Control Name: Revised Policy, Procedures, and Job aids

Control Definition: FAA guidance and instructions for inspectors during the performance of their duties as a result of inspector feedback.

Output Name: Certification activities

Output Definition: The actions on the certificate performed as a result of surveillance/inspection (e.g., certificate updates, suspensions, revocations, etc.).

Mechanism Name: ASI/Resource personnel

Mechanism Definition: The personnel necessary for performing the inspection/surveillance activities. This includes support personnel such as ASA, supervisors, managers, region/national resource specialists, agricultural association personnel, and ACO personnel.

Input Name: Advisory circulars

Input Definition: Document that advises operators how to accomplish a specific task.

Output Name: Investigative reports

Output Definition: Accident, enforcement, and all other reports pertinent to the investigation.

Mechanism Name: Hardware/Software

Mechanism Definition: Any tools necessary to perform or accomplish a task such as computer systems and software programs.

Input Name: Special inspection requests

Input Definition: Any requests other than the normal inspection/surveillance activities (e.g., requests from TSA, FBI, etc.).

 ω

Output Name: Labor Distribution reporting

Output Definition: A database that ASIs and other FAA employees use to record the time, attendance, and activities.

Mechanism Name: Facilities/Supplies

Mechanism Definition: Facilities and supplies required to perform the oversight activities.

Input Name: SPAS

Input Definition: Identifies discrepancies within an operator.

Output Name: Ops/airworthiness feedback

Output Definition: Communications between operations and airworthiness inspectors.

Mechanism Name: Funding

Mechanism Definition: Budget to accomplish 14 CFR Part 137 oversight.

Input Name: ISIS data

Input Definition: Provides vital information on aircraft, airmen, and operators. It will also provide accident/incident records as well.

Output Name: PTRS/VIS/EIS record

Output Definition: Data generated as a result of certification/inspection/enforcement activities.

Mechanism Name: Job aids

Mechanism Definition: Checklists on how to conduct an investigation or inspection.

Input Name: Operators file

Input Definition: This provides ISIS and SPAS data and correspondence between the FAA and the operator.

Mechanism Name: Transportation

Mechanism Definition: Any government vehicle used for inspection or investigation.

Input Name: Investigations

Input Definition: The act of reviewing and fact finding as a result of an incident, accident, or an occurrence.

Input Name: Assigned accident investigation

Input Definition: Accident investigations assigned by management.

Input Name: Approved maintenance program

Input Definition: FAA approved maintenance program for 14 CFR Part 137 aircraft.

5.4.1 A3.1—Manage Airworthiness Inspections.

This function directs, schedules, and coordinates the following component activities of the perform airworthiness inspections: Review FAA Order 8300, review FAA operator information, perform operation inspection, perform investigation, and provide operation inspection resource.

Input Name: ISIS data

Input Definition: Provides vital information on aircraft, airmen, and operators. It will also provide accident/incident records as well.

Control Name: Revised policy, procedures, and job aids

Control Definition: FAA guidance and instructions for inspectors during the performance of their duties as a result of inspector feedback.

Output Name: FAA Order 8300.10 and other orders

Output Definition: FAA Order 8300.10—Airworthiness Inspector's Handbook and all other applicable FAA orders.

Mechanism Name: Hardware/Software

Mechanism Definition: Any tools necessary to perform or accomplish a task such as computer systems and software programs.

Input Name: Operators file

Input Definition: This provides ISIS and SPAS data and correspondence between the FAA and the operator.

Output Name: Aviation regulations

Output Definition: All CFRs applicable to 14 CFR Part 137 Agricultural Aircraft Operations.

Input Name: Enforcement actions

Input Definition: The actions taken as a result of investigation on a certificate holder such as certificate revocation, suspension, and penalties.

Output Name: Operation requirements

Output Definition: Resources, which the management identifies to accomplish 14 CFR Part 137 oversight.

Input Name: Inspection resources

Input Definition: Resources provided to accomplish 14 CFR Part 137 oversight.

5.4.2 A3.2—Review FAA Order 8300.

Reviewing FAA Order 8300 to accurately accomplish operation inspections and investigations.

Input Name: FAA Order 8300.10 and other orders

Input Definition: FAA Order 8300.10—Airworthiness Inspector's Handbook and all other applicable FAA orders.

Control Name: Aviation regulations

Control Definition: All CFRs applicable to 14 CFR Part 137 agricultural aircraft operations.

Output Name: Labor Distribution reporting

Output Definition: A database that ASIs and other FAA employees use to record the time, attendance, and activities.

Mechanism Name: ASI/Resource personnel

Mechanism Definition: The personnel necessary for performing the inspection/surveillance activities. This includes support personnel such as ASA, supervisors, managers, region/national resource specialists, agricultural association personnel, and ACO personnel.

Input Name: Operators file

Input Definition: This provides ISIS and SPAS data, and correspondence between the FAA and the operator.

Output Name: Training request

Output Definition: Management identifies and requests training for personnel that accomplish 14 CFR Part 137 oversight.

Mechanism Name: Hardware/Software

Mechanism Definition: Any tools necessary to perform or accomplish a task such as computer systems and software programs.

Input Name: ISIS data

Input Definition: Provides vital information on aircraft, airmen, and operators. It will also provide accident/incident records as well.

Mechanism Name: Facilities/Supplies

Mechanism Definition: Facilities and supplies required to perform the oversight activities.

Input Name: SPAS

37

Input Definition: Identifies discrepancies within an operator.

Input Name: Investigations

Input Definition: The act of reviewing and fact finding as a result of an incident, accident, or an occurrence.

<u>5.4.3 A3.3—Review FAA Operator Information</u>.

Reviewing operation files, ISIS and SPAS data and other available data sources.

Input Name: FAA Order 8300.10 and other orders

Input Definition: FAA Order 8300.10—Airworthiness Inspector's Handbook and all other applicable FAA orders.

Control Name: Aviation regulations

Control Definition: All CFRs applicable to 14 CFR Part 137 agricultural aircraft operations.

Output Name: PTRS/VIS/EIS record

Output Definition: Data generated as a result of certification/inspection/enforcement activities.

Mechanism Name: Hardware/Software

Mechanism Definition: Any tools necessary to perform or accomplish a task such as computer systems and software programs.

Input Name: Operators file

Input Definition: This provides ISIS and SPAS data and correspondence between FAA and operator.

Output Name: Labor Distribution reporting

Output Definition: A database that ASIs and other FAA employees use to record the time, attendance, and activities.

Mechanism Name: ASI/Resource personnel

Mechanism Definition: The personnel necessary for performing the inspection/surveillance activities. This includes support personnel such as ASA, supervisors, managers, region/national resource specialists, agricultural association personnel, and ACO personnel.

Input Name: ISIS data

Input Definition: Provides vital information on aircraft, airmen, and operators. It will also provide accident/incident records as well.

Output Name: Certification activities

Output Definition: The actions on the certificate performed as a result of surveillance/inspection (e.g., certificate updates/suspensions/revocations, etc.).

Mechanism Name: Facilities/Supplies

Mechanism Definition: Facilities and supplies required to perform the oversight activities.

Input Name: Special inspection requests

Input Definition: Any requests other than the normal inspection/surveillance activities (e.g., requests from TSA, FBI, etc.).

Input Name: SPAS

Input Definition: Identifies discrepancies within an operator.

5.4.4 A3.4—Perform Airworthiness Inspection.

This function involves performing airworthiness inspection of 14 CFR Part 137 certificate holders.

Input Name: Follow-up inspections

Input Definition: An inspection generated as a result of previous investigation or inspection.

Control Name: FAA Order 8300.10 and other orders

Control Definition: FAA Order 8300.10—Airworthiness Inspector's Handbook and all other applicable FAA orders.

Output Name: Labor Distribution reporting

Output Definition: A database that ASIs and other FAA employees use to record the time, attendance, and activities.

39

Mechanism Name: Funding

Mechanism Definition: Budget to accomplish 14 CFR Part 137 oversight.

Input Name: Ops/airworthiness feedback

Input Definition: Communications between operations and airworthiness inspectors.

Output Name: Ops/airworthiness feedback

Output Definition: Communications between operations and airworthiness inspectors.

Mechanism Name: Transportation

Mechanism Definition: Any government vehicle used for inspection or investigation.

Input Name: Advisory circulars

Input Definition: Document that advises operators how to accomplish a specific task.

Output Name: Inspection results

Output Definition: Data generated during the inspection activities.

Mechanism Name: ASI/Resource personnel

Mechanism Definition: The personnel necessary for performing the inspection/surveillance activities. This includes support personnel such as ASA, supervisors, managers, region/national resource specialists, agricultural association personnel, and ACO personnel.

Input Name: FAA Order 8300.10 and other orders

Input Definition: FAA Order 8300.10—Airworthiness Inspector's Handbook and all other applicable FAA orders.

Mechanism Name: Facilities/Supplies

Mechanism Definition: Facilities and supplies required to perform the oversight activities.

Input Name: Special inspection requests

Input Definition: Any requests other than the normal inspection/surveillance activities (e.g., requests from TSA, FBI, etc.).

Mechanism Name: Job aids

Mechanism Definition: Checklists on how to conduct an investigation or inspection.

Input Name: Approved maintenance program

Input Definition: FAA approved maintenance program for 14 CFR Part 137 aircraft.

5.4.5 A3.5—Perform Airworthiness Investigation.

This function involves performing airworthiness investigation of 14 CFR Part 137 certificate holders.

Input Name: Inspection results

Input Definition: Data generated during the inspection activities.

Control Name: Aviation regulations

Control Definition: All Federal Aviation Regulations applicable to 14 CFR Part 137 Agricultural Aircraft Operations.

Output Name: PTRS/VIS/EIS record

Output Definition: Data generated as a result of certification/inspection/enforcement activities.

Mechanism Name: Job aids

Mechanism Definition: Checklists on how to conduct an investigation or inspection.

Input Name: Assigned accident investigation

Input Definition: Accident investigations assigned by management.

Control Name: FAA Order 8300.10 and other orders

Control Definition: FAA Order 8300.10—Airworthiness Inspector's Handbook and all other applicable FAA orders.

Output Name: Investigative reports

Output Definition: Accident, enforcement, and all other reports pertinent to the investigation.

Mechanism Name: ASI/Resource personnel

Mechanism Definition: The personnel necessary for performing the inspection/surveillance activities. This includes support personnel such as ASA, supervisors, managers, region/national resource specialists, agricultural association personnel, and ACO personnel.

Input Name: Investigations

Input Definition: The act of reviewing and fact finding as a result of an incident, accident, or an occurrence.

Output Name: Enforcement actions

Output Definition: The actions taken as a result of investigation on a certificate holder such as certificate revocation, suspension, and

penalties.

Mechanism Name: Facilities/Supplies

Mechanism Definition: Facilities and supplies required to perform the oversight activities.

Output Name: Labor Distribution reporting

Output Definition: A database that ASIs and other FAA employees use to record the time, attendance, and activities.

Output Name: Follow-up inspections

Output Definition: An inspection generated as a result of previous investigation or inspection.

5.4.6 A3.6—Provide Airworthiness Inspection Resource.

This function acquires and allocates aircraft, personnel, parts, materials, facilities, equipment, automation, information infrastructure, tools, budget, publications, and any other required resources to support the execution of the airworthiness inspection.

Input Name: Operation requirements

Input Definition: Resources, which the management identifies to accomplish 14 CFR Part 137 oversight.

Control Name: FAA Order 8300.10 and other orders

Control Definition: FAA Order 8300.10—Airworthiness Inspector's Handbook and all other applicable FAA orders.

Output Name: Inspection resources

Output Definition: Resources provided to accomplish 14 CFR Part 137 oversight.

Mechanism Name: Funding

Mechanism Definition: Budget to accomplish 14 CFR Part 137 oversight.

Input Name: Training request

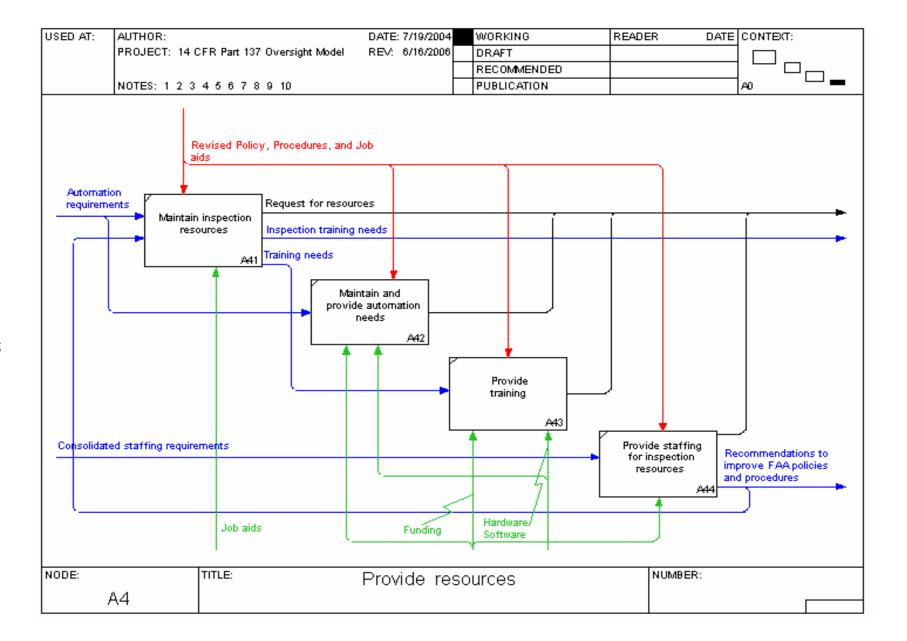
Input Definition: Management identifies and requests training for personnel that accomplish 14 CFR Part 137 oversight.

Mechanism Name: Facilities/Supplies

Mechanism Definition: Facilities and supplies required to perform the oversight activities.

Mechanism Name: Job aids

Mechanism Definition: Checklists on how to conduct an investigation or inspection.



4

5.5 A4—PROVIDE RESOURCES.

This function acquires and allocates aircraft, personnel, parts, materials, facilities, equipment, automation, information infrastructure, tools, budget, publications, and any other required resources to support the execution of the oversight operations.

Input Name: Automation requirements

Input Definition: Requirements for automation.

Control Name: Revised Policy, Procedures, and Job aids

Control Definition: FAA guidance and instructions for inspectors during the performance of their duties as a result of inspector

feedback.

Output Name: Request for resources

Output Definition: Any requests made for resources to accomplish a task.

Mechanism Name: Job aids

Mechanism Definition: Checklists on how to conduct an investigation or inspection.

Input Name: Consolidated staffing requirements

Input Definition: Combined staffing requirements to accomplish oversight activities.

Output Name: Inspection training needs

Output Definition: Any training needs required to accomplish a task.

Mechanism Name: Funding

Mechanism Definition: Budget to accomplish 14 CFR Part 137 oversight.

Output Name: Recommendations to improve FAA policies and procedures

Output Definition: A set of propositions to improve the FAA policies and procedures.

Mechanism Name: Hardware/Software

Mechanism Definition: Any tools necessary to perform or accomplish a task such as computer systems and software programs.

45

5.5.1 A4.1—Maintain Inspection Resources.

This function directs, schedules, and coordinates the following component activities of inspection resources: Maintain and provide automation needs, provide training, and provide staffing for inspection resources.

Input Name: Automation requirements

Input Definition: Requirements for automation.

Control Name: Revised Policy, Procedures, and Job aids

Control Definition: FAA guidance and instructions for inspectors during the performance of their duties as a result of inspector

feedback.

Output Name: Request for resources

Output Definition: Any requests made for resources to accomplish a task.

Mechanism Name: Job aids

Mechanism Definition: Checklists on how to conduct an investigation or inspection.

Input Name: Recommendations to improve FAA policies and procedures

Input Definition: A set of propositions to improve the FAA policies and procedures.

Output Name: Inspection training needs

Output Definition: Any training needs required to accomplish a task.

Output Name: Training needs

Output Name: Any training needs required to accomplish a task.

5.5.2 A4.2—Maintain and Provide Automation Needs.

This function identifies and assesses the automation needs and provides appropriate resources.

Input Name: Automation requirements

Input Definition: Requirements for automation.

Control Name: Revised Policy, Procedures, and Job aids

Control Definition: FAA guidance and instructions for inspectors during the performance of their duties as a result of inspector

feedback.

Output Name: Request for resources

Output Definition: Any requests made for resources to accomplish a task.

Mechanism Name: Funding

Mechanism Definition: Budget to accomplish 14 CFR Part 137 oversight.

Mechanism Name: Hardware/Software

Mechanism Definition: Any tools necessary to perform or accomplish a task such as computer systems and software programs.

5.5.3 A4.3—Provide Training.

This function identifies and assesses the training needs and provides appropriate training.

Input Name: Training needs

Input Definition: Any training needs required to accomplish a task.

Control Name: Revised Policy, Procedures, and Job aids

Control Definition: FAA guidance and instructions for inspectors during the performance of their duties as a result of inspector

feedback.

Output Name: Request for resources

Output Definition: Any requests made for resources to accomplish a task.

Mechanism Name: Funding

Mechanism Definition: Budget to accomplish 14 CFR Part 137 oversight.

Mechanism Name: Hardware/Software

Mechanism Definition: Any tools necessary to perform or accomplish a task such as computer systems and software programs.

5.5.4 A4.4—Provide Staffing for Inspection Resources.

This function identifies and assesses the staffing needs and provides appropriate staffing for inspection.

Input Name: Consolidated staffing requirements

Input Definition: Combined staffing requirements to accomplish oversight activities.

Control Name: Revised Policy, Procedures, and Job aids

Control Definition: FAA guidance and instructions for inspectors during the performance of their duties as a result of inspector

feedback.

Output Name: Request for resources

Output Definition: Any requests made for resources to accomplish a task.

Mechanism Name: Funding

Mechanism Definition: Budget to accomplish 14 CFR Part 137 oversight.

Output Name: Recommendations to improve FAA policies and procedures

Output Definition: A set of propositions to improve the FAA policies and procedures.

6. 14 CFR PART 137 RELATED INFORMATION.

This section documents the databases, systems, FAA regulations, FAA orders, handbook bulletins, advisory circulars associated with the oversight of an 14 CFR Part 137 agricultural aircraft operator.

6.1 SYSTEMS AND DATABASES.

The databases and systems that are associated with the 14 CFR Part 137 agricultural aircraft operator are listed in the table 1.

Table 1. Databases and Systems

Databases/Systems	Description
Accident/Incident Database	Maintains data collected during an FAA
Subsystem	investigation of an accident or an incident.
Aircraft (MSAT-B)	Provides information on aircraft.
Airman (MSAT-A)	Provides information on airmen.
Comprehensive Airman	Contains information relating to the
Information System	certification of Airmen.
Enforcement Information	Centralized database that is designed to edit,
System (EIS)	store, and administer information supporting
	the FAA Compliance and Enforcement
	Program as described in FAA Order 2150.3A.
National Program Tracking	Maintains information about FAA inspection
and Reporting Subsystem	and certification activity and results.
National Vital Information	Stores information about FAA certificate
Subsystem	holders operating under 14 CFR Parts 121,
	125, 129, 133, 135, 137, 141, 142, 145, 147,
	etc.
National Transportation	Contains detailed information gathered during
Safety Board Accident and	NTSB accident and incident investigations.
Incident Database (NTSB)	
Operations Specification	Used by inspectors and industry to generate
Subsystem	operations specifications. Maintains up-to-date
	information about certificate holders.
Policy Subsystem	Stores orders and notices, handbooks,
	handbook bulletins, flight standard information
	bulletins, and advisory circulars, etc.
Safety Performance Analysis	A computer-based application used to evaluate
System (SPAS)	both current and historical safety-related
	aviation data.
Integrated Safety Information	An information system that consists of several
System (ISIS)	separate aviation safety data subsystems.

6.2 REGULATIONS, ORDERS, BULLETINS, AND ADVISORY CIRCULARS.

The regulations, orders, handbook bulletins, advisory circulars (AC) associated with the 14 CFR Part 137 agricultural aircraft operator are listed below for operations and airworthiness inspections.

• Title 14 CFR—Operations Inspections:

- Part 1—Definitions and abbreviations
- Part 11—General rulemaking procedures
- Part 13—Investigative and enforcement procedures
- Part 61—Certification: Pilots, flight instructors, and ground instructors
- Part 63—Certification: Flight crewmembers other than pilots
- Part 91—General operating and flight rules
- Part 103—Ultralight vehicles
- Part 133—Rotorcraft external-load operations
- Part 137—Agricultural aircraft operations
- Part 141—Pilot schools
- Part 142—Training centers

• Title 14 CFR—Airworthiness Inspections:

- Part 1—Definitions and abbreviations
- Part 11—General rulemaking procedures
- Part 13—Investigative and enforcement procedures
- Part 21—Certification procedures for products and parts
- Part 23—Airworthiness standards: Normal, utility, acrobatic, and commuter category airplanes
- Part 25—Airworthiness standards: Transport category airplanes
- Part 27—Airworthiness standards: Normal category rotorcraft
- Part 29—Airworthiness standards: Transport category rotorcraft
- Part 33—Airworthiness standards: Aircraft engines
- Part 34—Fuel venting and exhaust emission requirements for turbine engine powered airplanes
- Part 35—Airworthiness standards: Propellers

- Part 36—Noise standards: Aircraft type and airworthiness certification
- Part 39—Airworthiness directives
- Part 43—Maintenance, preventive maintenance, rebuilding, and alteration
- Part 45—Identification and registration marking
- Part 47—Aircraft registration
- Part 65—Certification: Airmen other than flight crewmembers
- Part 91—General operating and flight rules
- Part 133—Rotorcraft external-load operations
- Part 137—Agricultural aircraft operations
- Part 145—Repair stations
- Part 147—Aviation maintenance technician schools
- Part 183—Representatives of the Administrator
- FAA and Other Orders—Operations Inspections:

FAA Order 8700.10, General Aviation Operations Inspector's Handbook Volume 2, Chapters:

- 115 Introduction to Part 137 Related Tasks
- 116 Conduct Certification of a Part 137 Operator
- 117 Conduct a Part 137 Base Inspection
- 118 Administer a Knowledge and Skill Test to an Agricultural Pilot
- 119 Inspect a Part 137 Dispensing Operation
- 120 Evaluate a Part 137 Congested Area Operations Plan
- 121 Monitor a Part 137 Congested Area Plan
- 122 Inspect a Part 137 Satellite Site/Facility

NTSB Order 830, Notification and Reporting of Aircraft Accidents or Incidents and Overdue Aircraft and Preservation of Aircraft Wreckage, Mail, Cargo, and Records:

- FAA Order 2150.3 Compliance and Enforcement
- FAA Order 8020.11 Aircraft Accident and Incident Notification, Investigation and Reporting

- 1800.56E National Flight Standards Work Program Guidelines
- 1320.46C Advisory Circular System
- 8000.38F Aviation Safety Inspector Credential Program
- FAA and Other Orders—Airworthiness Inspections:

Order 8300.10 Airworthiness Inspector's Handbook Volume 2, Chapters:

- 135 Introduction to FAR Part 133 Related Tasks
- 136 Evaluate FAR Part 133 Operator
- 137 Evaluate FAR Part 133 Rotocraft Lease Agreement
- 146 Introduction to FAR Part 137
- 147 Evaluate FAR Part 137 Applicant

FAA Order 2150.3 Compliance and Enforcement

FAA Order 8020.11 Aircraft Accident and Incident Notification, Investigation, and Reporting

FAA Order 8130.2D Airworthiness Certification of Aircraft and Related Products

FAA Order 1800.56E National Flight Standards Work Program Guidelines

1320.46C Advisory Circular System

8000.38F Aviation Safety Inspector Credential Program

8110.50 Submitting Instructions for Continued Airworthiness for Type Certificates, Amended Type Certificates, and Supplemental Type Certificates

8110.51, Acceptability of Previously Approved Certification Compliance Data From Foreign Sources

8120.10, Suspected Unapproved Parts Program

8120.13, International Cooperative Supplier Surveillance Program Procedures

NTSB Order 830, Notification and Reporting of Aircraft Accidents or Incidents and Overdue Aircraft, and Preservation of Aircraft Wreckage, Mail, Cargo, and Records

• Handbook Bulletins—Operations Inspections:

HBAW 98-14A North American Free Trade Agreement (NAFTA)

HBAW 00-18 MMEL Final Policy Letters--New Location

HBAW 00-19, Safety Performance Analysis System: Usage for Surveillance and Certification Planning, Investigation, and Work Program Management

HBAW 95-02A Voluntary Self Disclosure

HBAW 95-04 Government Aircraft Operations; Public Aircraft Operations Versus Civil Aircraft Operations

HBAW 97-17 FAA Flight Program Enforcement Guidelines

HBAW 99-12A Streamlined Administrative Action Process

• Joint Flight Standards Information Bulletin for Airworthiness (FSAW), Air Transportation (FSAT), and General Aviation (FSGA)—Operations Inspections:

FSAW 00-08A Resetting Tripped Circuit Breakers

FSAW 01-04 Landing Gear Spray for Foot-and-Mouth Disease

FSAW 94-50 Joint Flight Standards Information Bulletin for Air Transportation (FSAT), General Aviation (FSGA), and Airworthiness (FSAW)

FSAW 95-05A North American Free Trade Agreement (NAFTA) Interim Guidance (Amended)

FSAW 95-08 Use of the Cockpit Jumpseat for Parts 91 and 135 Operation

• General Aviation Handbook Bulletins (HBGA)—Operations Inspections:

HBGA 00-07 Expiration of SFAR 62 and Enforcement of 14 CFR Section 91.215(B) (2)

HBGA 00-10A Program Tracking & Reporting Subsystem (PTRS) Documentation of Action Required by Flight Standards Bulletins

HBGA 00-14 Safety Performance Analysis System: Usage for Surveillance and Certification Planning, Investigation, and Work Program Management

HBGA 00-15 Emergency Airworthiness Directive (AD) Notification, OpSpecs Paragraph A047

HBGA 00-17 Fuel Reserve Computation and Calibrations-14 CFR Part 133 Operators

HBGA 00-19 Audits of Airline Transport Pilot (ATP) Applicant Flight Experience Requirements

HBGA 01-03 Standardizing Training Center Curricula and Related Syllabus at Multiple Centers of One Training Company

HBGA 93-01 Operations Inspector Currency Requirements

HBGA 98-08A North American Free Trade Agreement (NAFTA)

HBGA 98-11 Procedures for Inspectors Taking Knowledge and/or Practical Tests in the Field

HBGA 98-12 Certification of Training Centers and Issuance of Training Specifications

HBGA 99-06 Reporting Qualification and Approval of Flight Training Devices Level 1 Through 5

HBGA 99-09 Occupancy of any Observer's Seat Located on the Flight Deck

HBGA 99-13 Operations Over Densely Populated Areas, Experimental, Amateur-Built Aircraft

HBGA 99-14A Streamlined Administrative Action Process

HBGA 99-15 Letter of Authorization for Continued use of Level 1 Flight Training Devices in Accordance with 14 CFR Section 61.4(b)

HBGA 99-20A Announcement of New Database System on the FAA Intranet: Airplane Flight Manual Revisions and Aircraft Manufacturer Operations Bulletins

General Aviation Information Bulletins (FSGA)—Operations Inspections:

FSGA 00-04A Resetting Tripped Circuit Breakers

FSGA 00-05 Standard Operating Procedures for Flight Deck Crewmembers (AC 120-71), Including Stabilized Approach

FSGA 00-06 Increased Surveillance and Testing of Surface Movement Operations

FSGA 00-08 Portable Equipment & Carry-on Devices Intended for Flight Deck Use

FSGA 01-03 Preparation Standard for 14 CFR Section 142.53(B)

FSGA 94-12 Procedures for Reporting of Alcohol or Drug Test Results and Refusals to Submit to Testing by Flight Crewmembers to CAMI

FSGA 97-03 Standard Procedures for Fuel Planning for Part 133 Operations

FSGA 99-02A General Aviation 14 CFR Part 91 Land and Hold Short Operations (LAHSO)

- Advisory Circulars—Operations Inspections:
 - 00-6A Aviation Weather
 - 00-24B Thunderstorms
 - 00-30B Atmospheric Turbulence Avoidance
 - 00-45E Aviation Weather Services
 - 00-46D Aviation Safety Reporting Program
 - 00-54 Pilot Windshear Guide
 - 00-57 Hazardous Mountain Winds and Their Visual Indications
 - 00-58 Voluntary Disclosure Reporting Program
 - 00-60 North American Free Trade Agreement and Specialty Air Services Operations
 - 00-62 Internet Communications of Aviation Weather and Notams
 - 13-1 Aviation Safety Inspector Work Site Access Aviation Safety Inspector's Credential, FAA Form 110A
 - 20-29B Use of Aircraft Fuel Anti-Icing Additives
 - 20-30B Aircraft Position Light and Anticollision Light Installations
 - 20-32B Carbon Monoxide (CO) Contamination in Aircraft—Detection and Prevention
 - 20-34D Prevention of Retractable Landing Gear Failures
 - 20-35C Tiedown Sense
 - 20-42C Hand Fire Extinguishers for Use in Aircraft
 - 20-47 Exterior Colored Band Around Exits on Transport Airplanes
 - 20-60 Accessibility to Excess Emergency Exits
 - 20-68B Recommended Radiation Safety Precautions for Ground Operation of Airborne Weather Radar

- 20-73 Aircraft Ice Protection
- 20-111 Communication Interference Caused by Unintentional Keyed Microphones
- 20-113 Pilot Precautions and Procedures to be Taken in Preventing Aircraft Reciprocating Engine Induction System and Fuel System Icing Problems
- 20-119 Fuel Drain Valves
- 20-125 Water in Aviation Fuels
- 20-132 Public Aircraft
- 20-133 Cockpit Noise and Speech Interference Between Crewmember
- 20-136 Protection of Aircraft Electrical/Electronic Systems Against the Indirect Effects of Lightning
- 21-17 Carriage of Cargo in Restricted Category Aircraft and Other Special Purpose Operations
- 60-4A Pilot's Spatial Disorientation
- 60-6B Airplane Flight Manuals (AFM), Approved Manual Materials, Markings, and Placards—Airplanes
- 60-21 Announcement of Availability: A Series of Aeronautical Decision Making Training Manuals
- 60-22 Aeronautical Decision Making
- 61-23C Pilot's Handbook of Aeronautical Knowledge
- 61-67C Stall and Spin Awareness Training
- 61-84B Role of Preflight Preparation
- 61-98 Currency and Additional Qualification Requirements for Certified Pilots
- 61-126 Qualification and Approval of Personal Computer-Based Aviation Training Devices
- 61-134 General Aviation Controlled Flight Into Terrain Awareness
- 90-23F Aircraft Wake Turbulence

- 90-34 Accidents Resulting From "Wheelbarrowing" in Tricycle Gear Equipped Aircraft
- 90-42F Traffic Advisory Practices at Airports Without Operating Control Towers
- 90-95 Unanticipated Right Yaw in Helicopters
- 91-6A Water, Slush, and Snow on the Runway
- 91-13C Cold Weather Operation of Aircraft
- 91-23A Pilot's Weight and Balance Handbook
- 91-32B Safety in and Around Helicopters
- 91-33A Use of Alternate Grades of Aviation Gasoline for Grade 80/87, and Use of Automotive Gasoline
- 91-35 Subject: Noise, Hearing Damage, and Fatigue in General Aviation Pilots
- 91-36C Visual Flight Rules (VFR) Flight Near Noise-Sensitive Areas
- 91-38A Large and Turbine-Powered Multiengine Airplanes, Part 91, Subpart D
- 91-42D Hazards of Rotating Propeller and Helicopter Rotor Blades
- 91-43 Unreliable Airspeed Indications
- 91-44A Operational and Maintenance Practices for Emergency Locator Transmitters and Receivers
- 91-46 Gyroscopic Instruments—Good Operating Practices
- 91-50 Importance of Transponder Operation and Altitude Reporting
- 91-51A Effect of Icing on Aircraft Control and Airplane Deice and Anti-Ice Systems
- 91-53A Noise Abatement Departure Profiles
- 91-55 Reduction of Electrical System Failures Following Aircraft Engine Starting
- 91-61 A Hazard in Aerobatics: Effects of G-Forces on Pilots
- 91-63C Temporary Flight Restrictions (TFRs/TFR)
- 91-65 Use of Shoulder Harness in Passenger Seats

91-66 Noise Abatement for Helicopters

91-67 Minimum Equipment Requirements for General Operations Under FAR Part 91

91-69 Seaplane Safety for 14 CFR Part 91 Operators

91-73A Part 91 and Part 135 Single-Pilot Procedures During Taxi Operations

91-75 Attitude Indicator

103-6 Ultralight Vehicle Operations—Airports, Air Traffic Control, and Weather

103-7 The Ultralight Vehicle

133-1A Rotorcraft External-Load Operations in Accordance With Federal Aviation Regulations Part 133

137-1 Agricultural Aircraft Operations

• Handbook and Information Bulletins—Airworthiness Inspections:

FSAW 94-41, Global Positioning System/Differential Global Positioning System Special Use Applications

HBAW 00-19 Safety Performance Analysis System: Usage for Surveillance and Certification Planning, Investigation, and Work Program Management

HBAW 95-06A Maintenance Programs for Aircraft Engines, Including Leased Engines, Used by Operators of Transport Category Aircraft

HBAW 98-14A North American Free Trade Agreement (NAFTA)

HBAW 00-03 Issuing Standard Airworthiness Certificates for FAA Type-Certificated Civil Rotorcraft

HBAW 02-02A, Issuing Original Airworthiness Certificates for "Type Certificated" Restricted Category Military Surplus Helicopters

HBAW 00-09A, Airman Certificate Requirements for Title 14 of the Code of Federal Regulations (14 CFR) Part 145 Repair Station Supervisory Personnel

HBAW 00-18 MMEL Final Policy Letters—New Location

HBAW 03-05 B, Acceptance of Data Approved by the United Kingdom Civil Aviation Authority or the Luftfahrt-Bundesamt of the Federal Republic of Germany for U.S. State of Design Transport Category Airplanes

HBAW 04-03 Conducting Air Carrier/Air Agency Inspections to Detect Unapproved Parts

HBAW 92-05 Definition of "Sensitive" Altimeters (Reference Section 91.205(D)(5) of the Federal Aviation Regulations)

HBAW 95-02A Voluntary Self Disclosure

HBAW 95-04 Government Aircraft Operations; Public Aircraft Operations Versus Civil Aircraft Operations

HBAW 95-13A Maintenance of Restricted Category Surplus Military (RCSM) Aircraft

HBAW 95-14 Adherence to Advisory Circular 120-27c, "Aircraft Weight and Balance Control"

HBAW 96-02 Acceptance of Documentation for New Parts Received From the Original Equipment Manufacturer

HBAW 96-03 Experimental Aircraft Maintenance/Alteration

HBAW 96-06A Inspection Planning Guide (IPG) for UH-1 and OH-58, A, A+, and C Series Helicopters

HBAW 96-08 Aviation Safety Inspectors (ASI) Guidance for Detecting Unapproved Parts to Accomplish PTRS Codes 3622/5622 for Air Carriers and 3668/5668 for Air Agencies.

HBAW 97-08A Clarification of 14 CFR Section 145.47(B), Calibration of Inspection and Test Equipment

HBAW 97-09 Limited, Specialized Services Criteria

HBAW 97-10 Program Tracking and Reporting Subsystem (PTRS) Reporting of Suspected Unapproved Parts (SUP) Investigations and Associated Activities

HBAW 97-17 FAA Flight Program Enforcement Guidelines

HBAW 97-18 Inappropriate Ratings for Repair Stations (Helicopter OH-58)

HBAW 98-11 Issuing Operating Limitations for Experimental Category, Amateur-Built Aircraft for Flight Over Densely Populated Areas (14 CFR 91.319(c))

HBAW 98-14A North American Free Trade Agreement (NAFTA)

HBAW 98-19A Implementation of Technical Standard Orders for Parts: TSO-C148, Aircraft Mechanical Fasteners; TSO-C149, Aircraft Bearings; and TSO-C150, Aircraft Seals

HBAW 98-20 Designated Engineering Representatives Approvals of Alternative Methods of Compliance to Airworthiness Directives and AD Mandated Repairs

HBAW 99-12A Streamlined Administrative Action Process

HBAW 99-17 "Follow-On" Installation and Approval Procedures/Considerations of Primary Means and Supplemental Global Positioning System (GPS) Equipment

 Joint Flight Standards Information Bulletin for Airworthiness (FSAW), Air Transportation (FSAT), and General Aviation (FSGA)—Airworthiness Inspections:

FSAW 00-08A Resetting Tripped Circuit Breakers

FSAW 01-02A Aircraft Flight Manual Supplement Signature Approvals of Traffic Alert and Collision Avoidance Systems (TCAS II) Aircraft Flight Manual Supplements Previously Approved Under Type Certification (TC) or Supplemental Type Certification (STC)

FSAW 01-04 Landing Gear Spray for Foot-and-Mouth Disease

FSAW 02-03A Follow-On Approval of Class B Terrain Awareness and Warning Systems (TAWS)

FSAW 02-06 Field Approval Requests

FSAW 02-07 Potential Hazard to Aircraft Wiring Systems

FSAW 02-08 Aging Transport Non-Structural Systems Program

FSAW 02-10 Electrical Wiring Interconnection System (EWIS) Protections & Cautions During Maintenance & Alteration

FSAW 02-12 Guidance Addressing Operational Check Flights Following Maintenance Of Air Carrier Aircraft

FSAW 03-01 Safety Hazards Associated With Hidden Structural Damage on Transport Category Airplanes

FSAW 03-02 Installation of Smoke Barriers on Douglas DC-8 Cargo Aircraft

FSAW 03-03 Special Flight Authorization (SFA) for Canadian "Owner-Maintenance" Category Aircraft

FSAW 03-04A T-34 Front Spar Modifications: Data Necessary for an Alternate Method of Compliance to AD 2001-13-18 R1

FSAW 03-05 Field Approvals of Turbine/Turboprop Engine Installations on Piston-Engine Powered Aircraft

FSAW 03-07 Calibrating and Maintaining Fuel Quantity Indicating Systems for Helicopters Operating Under 14 CFR Part 133

FSAW 03-09 Changes to Special Purpose Operations & Field Approvals for Restricted Category Agriculture Aircraft

FSAW 94-32A Installation and Approval Procedures of Global Positioning System (GPS) Equipment Used for Supplemental Navigation for En Route, Terminal and Non-Precision Approaches

FSAW 94-41 Global Positioning System/Differential Global Positioning System Special Use Applications

FSAW 94-48 Procedures to be Used to Approve Instructions for Continued Airworthiness Approved by Supplemental Type Certificates (STC)

FSAW 95-05A North American Free Trade Agreement (NAFTA) Interim Guidance (Amended)

FSAW 95-08 Use of the Cockpit Jumpseat for Parts 91 and 135 Operation

FSAW 95-09C Electronic Horizontal Situation Indicator (EHSI) Approvals

FSAW 96-15 Follow-On Approval of the Ryan Traffic and Collision Alerting Device (TCAD) and Other Traffic and Collision Advisory Equipment

FSAW 97-02 Modification of Technical Standard Order (TSO) Altimeters

FSAW 97-06 Clarification of FAA Position on Testing With Regard to Section 43.2(A)(2), Records of Overhaul and Rebuilding

FSAW 97-09 Global Positioning Systems (GPS) Localizer Lockout/Override Function

FSAW 97-16A Lightning/High Intensity Radio Frequency (HIRF) Protection Maintenance

FSAW 97-17A Certificate and Operations Specifications Evaluation of Limited Specialized Services Rated Repair Stations

FSAW 97-18 Manufacturers' Service Documents

FSAW 97-21 Acceptable Means of Maintaining Cargo Containers, Pallets, and Netting Installed on Transport Category Aircraft

FSAW 98-04B Follow-On Approval of Traffic Alert/Advisory Systems and Traffic Alert and Collision Avoidance Systems (TCAS I), Not Intended to Meet Requirements of or to be Substituted for Traffic Alert and Collision Avoidance Systems (TCAS II), When Required

FSAW 98-09 Availability, Retrieval and Use of Airworthiness Technical Data Obtained via Internet Providers or Other Electronic Media

FSAW 98-11 Certification and Surveillance of Repair Stations/Operators Authorized to Perform Nickel Cadmium Plating Operations

• General Aviation Handbook Bulletins (HBGA)—Airworthiness Inspections:

HBGA 00-10A Program Tracking & Reporting Subsystem (PTRS) Documentation of Action Required by Flight Standards Bulletins

HBGA 00-14 Safety Performance Analysis System: Usage for Surveillance and Certification Planning, Investigation, and Work Program Management

HBGA 00-15 Emergency Airworthiness Directive (AD) Notification, OpSpecs Paragraph A047

HBGA 00-17 Fuel Reserve Computation and Calibrations—14 CFR Part 133 Operators

HBGA 98-08A North American Free Trade Agreement (NAFTA)

HBGA 99-09 Occupancy of any Observer's Seat Located on the Flight Deck

HBGA 99-20A Announcement of New Database System on the FAA Intranet: Airplane Flight Manual Revisions and Aircraft Manufacturer Operations Bulletins

• Advisory Circulars (AW)—Airworthiness Inspections:

00-33A Nickel-Cadmium Battery Operational, Maintenance, and Overhaul Practices

00-34A Aircraft Ground Handling and Servicing

00-41B FAA Quality Control System Certification Program 00-46D Aviation Safety Reporting Program

00-55 Announcement of Availability FAA Order 8130.21A, Procedure for Completion and Use of FAA Form 8130, Airworthiness Approval Tag

- 00-58 Voluntary Disclosure Reporting Program
- 00-60 North American Free Trade Agreement and Specialty Air Services Operations
- 13-1 Aviation Safety Inspector Work Site Access Aviation Safety Inspector's Credential, FAA Form 110A.
- 20-24B Qualification of Fuels, Lubricants, and Additives for Aircraft Engines
- 20-27F Certification and Operation of Amateur-Built Aircraft
- 20-29B Subject: Use of Aircraft Fuel Anti-Icing Additives
- 20-30B Aircraft Position Light and Anticollision Light Installations
- 20-33B Technical Information Regarding Civil Aeronautics Manuals 1, 3, 4A, 4B, 5, 6, 7, 8, 9, 13, and 14
- 20-36S Index of Articles (Materials, Parts, Processes, and Appliances) Certificated Under the Technical Standard Order System
- 20-37D Aircraft Metal Propeller Maintenance
- 20-41A Substitute Technical Standard Order (TSO) Aircraft Equipment
- 20-42C Hand Fire Extinguishers for Use in Aircraft
- 20-43C Aircraft Fuel Control
- 20-44 Glass Fiber Fabric for Aircraft Covering
- 20-45 Safetying of Turnbuckles on Civil Aircraft
- 20-47 Exterior Colored Band Around Exits on Transport Airplanes
- 20-48 Practice Guide for Decontaminating Aircraft
- 20-52 Change: 1 Maintenance Inspection Notes for Douglas DC-6/7 Series Aircraft
- 20-53A Protection of Airplane Fuel Systems Against Fuel Vapor Ignition Due to Lightning
- 20-56A Marking of TSO-C72b Individual Flotation Devices
- 20-62D Eligibility, Quality, and Identification of Aeronautical Replacement Parts

20-65A U.S. Airworthiness Certificates and Authorizations for Operation of Domestic and Foreign Aircraft

20-66A Vibration and Fatigue Evaluation of Airplane Propellers

20-67B Airborne VHF Communications Equipment Installations

20-68B Recommended Radiation Safety Precautions for Ground Operation of Airborne Weather Radar

20-69 Conspicuity of Aircraft Instrument Malfunction Indicators

20-71 UAL Locking Devices on Fasteners

20-73 Aircraft Ice Protection

20-74 Aircraft Position and Anticollision Light Measurements

20-77 Use of Manufacturer's Maintenance Manuals

20-88A Guidelines on the Marking of Aircraft Powerplant Instruments (Displays)

20-94 Digital Clock Installation in Aircraft

20-95 Fatigue Evaluation of Rotorcraft Structure

20-96 Surplus Military Aircraft

20-99 Antiskid Associated Systems

20-100 General Guidelines for Measuring Fire-Extinguishing Agent Concentrations in Powerplant Compartments

20-103 Aircraft Engine Crankshaft Failure

20-104 Revised Powerplant Engineering Report No. 3a, Standard Fire Test Apparatus and Procedure (for Flexible Hose Assemblies)

20-105B Reciprocating Engine Power-Loss Accident Prevention and Trend Monitoring

20-106 Aircraft Inspection for the General Aviation Aircraft Owner

20-107A Composite Aircraft Structure

20-109A Service Difficulty Program (General Aviation)

- 20-110L Index of Aviation Technical Standard Orders
- 20-111 Communication Interference Caused by Unintentional Keyed Microphones
- 20-112 Airworthiness and Operational Approval of Airborne Systems to be Used in Lieu of a Ground Proximity Warning System(s) (GPWS)
- 20-114 Manufacturers' Service Documents
- 20-115B RTCA, Inc., Document RTCA/DO-178B
- 20-116 Marking Aircraft Fuel Filler Openings With Color Coded Decals
- 20-117 Hazards Following Ground Deicing and Ground Operations in Conditions Conducive to Aircraft Icing
- 20-119 Fuel Drain Valves
- 20-120 Nondirectional Beacon Frequency Congestion
- 20-121A Airworthiness Approval of Loran-C Navigation Systems for Use in the U.S. National Airspace System (NAS) and Alaska
- 20-124 Water Ingestion Testing for Turbine Powered Airplanes
- 20-125 Water in Aviation Fuels
- 20-128A Design Considerations for Minimizing Hazards Caused by Uncontained Turbine Engine and Auxiliary Power Unit Rotor Failure
- 20-131A Airworthiness Approval of Traffic Alert and Collision Avoidance Systems (TCAS-II) and Mode S Transponders
- 20-132 Public Aircraft
- 20-134 Test Procedures for Maximum Allowable Airspeed Indicators
- 20-135 Powerplant Installation and Propulsion System Component Fire Protection Test Methods, Standards, and Criteria
- 20-136 Protection of Aircraft Electrical/Electronic Systems Against the Indirect Effects of Lightning
- 20-137 Dynamic Evaluation of Seat Restraint Systems & Occupant Restraint for Rotorcraft (Normal and Transport)

- 20-138A Airworthiness Approval of Global Navigation Satellite System (GNSS) Equipment
- 20-142 Eligibility and Evaluation of U.S. Military Surplus Flight Safety Critical Aircraft Parts, Engines, and Propellers
- 20-143 Installation, Inspection, and Maintenance of Controls for General Aviation Reciprocating Aircraft Engines
- 20-144 Recommended Method for FAA Approval of Aircraft Fire Extinguishing System Components
- 20-145 Guidance for Integrated Modular Avionics (IMA) That Implement TSO-C153 Authorized Hardware Elements
- 20-146 Methodology for Dynamic Seat Certification by Analysis for Use in Parts 23, 25, 27, and 29 Airplanes and Rotorcraft
- 20-147 Turbojet, Turboprop, and Turbofan Engine Induction System Icing and Ice Ingestion
- 21-1B Production Certificates
- 21-2K Export Airworthiness Approval Procedures
- 21-4B Special Flight Permits for Operation of Overweight Aircraft
- 21-6A Production Under Type Certificate Only
- 21-9A Manufacturers Reporting Failures, Malfunctions, or Defects
- 21-10A Flight Recorder and Cockpit Voice Recorder Underwater Locating Devices
- 21-12B Application for U.S. Airworthiness Certificate, FAA FORM 8130-6
- 21-13 Standard Airworthiness Certification of Surplus Military Aircraft and Aircraft Built From Spare and Surplus Parts
- 21-15L Announcement of Availability—Aircraft, Aircraft Engines, and Propeller Type Certificate Data Sheets and Specifications
- 21-16D RTCA Document DO-160D
- 21-17 Carriage of Cargo in Restricted Category Aircraft and Other Special Purpose Operations

- 21-18 Bilateral Airworthiness Agreements
- 21-19A Installation of Used Aircraft Engines in New Production Aircraft
- 21-21 Use of Automobile Gasoline in Agricultural Aircraft
- 21-23A Airworthiness Certification of Civil Aircraft, Engines, Propellers, and Related Products Imported to the United States
- 21-24 Extending a Production Certificate to a Facility Located in a Bilateral Airworthiness Agreement Country
- 21-25A Approval of Modified Seating Systems Initially Approved Under a Technical Standard Order
- 21.25-1 Issuance of Type Certificate: Restricted Category Agricultural Airplanes
- 21-26 Quality Control for the Manufacture of Composite Structures
- 21-29B Change 2 Detecting and Reporting Suspected Unapproved Parts
- 21-34 Shoulder Harness—Safety Belt Installations
- 21-37 Primary Category Aircraft
- 21-38 Disposition of Unsalvageable Aircraft Parts and Materials
- 21-40 Application Guide for Obtaining a Supplemental Type Certificate
- 39-6S Announcement of Availability—Summary of Airworthiness Directives
- 39-7C Airworthiness Directives
- 39-8 Continued Airworthiness Assessments of Powerplant and Auxiliary Power Unit Installations of Transport Category Airplanes
- 43 Maintenance, Preventive Maintenance, Rebuilding, and Alteration (All ACs applicable in 43)
- 45-2B Identification and Registration Marking
- 45-3 Installation, Removal, or Change of Identification Data and Identification Plates on Aircraft Engines
- 65-9A Airframe & Powerplant Mechanics General Handbook

- 65-11B Airframe and Powerplant Mechanics Certification Information
- 65-12A Airframe and Powerplant Mechanics Powerplant Handbook
- 65-15A Airframe and Powerplant Mechanics Airframe Handbook
- 91-14D Altimeter Setting Sources
- 91-23A Pilot's Weight and Balance Handbook
- 91-26 Maintenance and Handling of Air-Driven Gyroscopic Instruments
- 91-32B Safety in and Around Helicopters
- 91-33A Use of Alternate Grades of Aviation Gasoline for Grade 80/87, and Use of Automotive Gasoline
- 91-38A Large and Turbine-Powered Multiengine Airplanes, Part 91, Subpart D
- 91-44A Operational and Maintenance Practices for Emergency Locator Transmitters and Receivers
- 91-46 Gyroscopic Instruments—Good Operating Practices
- 91-51A Effect of Icing on Aircraft Control and Airplane Deice and Anti-Ice Systems
- 91-55 Reduction of Electrical System Failures Following Aircraft Engine Starting
- 91-56A Continuing Structural Integrity Program for Large Transport Category Airplanes
- 91-59 Inspection and Care of General Aviation Aircraft Exhaust Systems
- 91-60 The Continued Airworthiness of Older Airplanes
- 91-67 Minimum Equipment Requirements for General Operations Under Far Part 91
- 133-1A Rotorcraft External-Load Operations in Accordance With Federal Aviation Regulations Part 133
- 137-1 Agricultural Aircraft Operations
- 140-6C The Development Use of Major Repair Data Under Provisions of Special Regulation No. 36
- 145-6 Repair Stations for Composite and Bonded Aircraft Structure